

LEUCORRHEA CONSIDERED IN RELATION TO ITS CONSTITUTIONAL CAUSES AND TREATMENT.

BY FORDYCE BARKER, M. D., LL. D.,

New York.

It is probable that many feel an apology is due for taking up the time of this Society in discussing so common a disorder, with which every medical man is familiar. But it has seemed to me that as leucorrhea is not a distinct disease, but a symptom of many different and even opposite pathological conditions, there has been a neglect of its study by gynecologists for some years past, and practically a forgetfulness of the fact that it not rarely originates from constitutional causes, and that when long continued it becomes itself a cause of local and important pathological changes.

In the works of Sir Charles Mansfield Clark, Drs. Ashwell, Henry Bennet, and Tyler Smith, this affection is fully and most ably discussed ; but the work of the last of these writers was published more than a quarter of a century ago, and no writer on diseases of women since that time has considered it, except incidentally as a symptom of some local disease, with the exception of Courty, Stoltz, and Dr. Robert Barnes, who call attention to some of its constitutional causes. I find this to be equally true of American, English, French, and German gynecologists. After a careful examination of all the writers in these different languages, and a thorough search for anything written on the subject referred to in the "Index Medicus," and the bibliography of the "Nouveau dictionnaire de médecine et de

chirurgie," I have been greatly surprised at the meagreness of the literature of the past twenty-five years on this subject.

The great improvement in physical exploration resulting from the introduction of Marion Sims's instruments and methods, and the use of the uterine sound, tents, bimanual examinations, and microscopy, have led to a careful study of organic changes as to structure and relative position, but seems to have been attended with a corresponding neglect of some other equally important points, and consequently their associated therapeutics.

If I may be pardoned for referring to personal experience, I will say that my opportunities for appreciating this fact, encompassed as I am by some of our most eminent surgical gynecologists, are probably somewhat exceptional, from the fact that for years past I see annually many patients who have previously been under the care of, and no doubt have received the best of surgical treatment from, men whom all regard as most eminent. Some have had the cervix incised, others have had it sewed up; others have had the cavity of the uterus scraped out, and others have only been treated by pessaries. Most have believed themselves, and no doubt have been, greatly improved for a time; but finding that their symptoms have returned, they have gone back to their former physician, and have again received local treatment. A large proportion of them have again thought themselves cured, but after a period varying from months to years, the leucorrhea, the back-ache, the irritability of the bladder, and the nerve disturbances have returned as badly as before, and the patient has been wrongly inclined to regard her physician, whom she at first enthusiastically adored, as after all a fraud.

In a smaller number of cases I have had occasion to suspect that it was the physician who wrongly believed the patient to be a fraud. The regularity and persistency of her visits have worn him out, until he has come to that point that he would rather take an emetic than see her enter his consulting room, as the "damnable iteration" of

her symptoms is sure to give him a warning of Trousseau's vertigo *a stomacho laso*, and so he gets rid of her the best way he can, perhaps by sending her to me.

It must be frankly confessed that this class are not generally interesting either as patients or cases, and I always feel a deep sympathy and pity for myself when I have such to treat, although I know of some, more happily organized, who seem to build up a fine practice from just this class. It is a melancholy fact that duty demands of us to regard such from the stand-point of our patient and not from our own.

Leucorrhea is the most constant of all the symptoms complained of by this class of patients, and usually it is regarded by them as the most important, and as being the cause of the debility, the back-ache, neuralgic pains, and menstrual disturbances from which they suffer. I am inclined to the belief that there is a larger measure of truth in their theory on this point than is usually considered by the profession, for in many but slight evidence of any organic disease, either from change of tissue or position, is found to explain the symptoms. Such disease probably had existed before I saw the patient, and had been cured by treatment. In a certain proportion careful inquiry would bring out the fact that for a while after treatment they had been quite free from all symptoms of disease, and that the first which attracted attention was the recurrence of the leucorrhea, followed by back-ache, debility, various reflex pains, and menstrual disturbances — in some painful and scanty menstruation, in others profuse discharges, or diminished intervals between the catamenial periods. In this class there was always found some pathological condition of the organs in the pelvic cavity, and in many this disappeared after constitutional treatment, without any local applications except vaginal injections.

For many years I was an entire disbeliever in the opinion of Tyler Smith that leucorrhea was in many cases the primary cause of morbid states of the os and cervix uteri; and while now I am not at all disposed to accept the state-

ment that this is the fact in a majority of cases, in the past few years I have been convinced that this is true in some. My observation and clinical experience have confirmed some of his views which I formerly rejected.

He expressed the belief that he was the first to call attention to the fact that long-continued leucorrhœa slowly induced inversion of the canal of the cervix, thus causing increased pain and distress. He asserts that "when the canal of the cervix uteri is thus inverted or everted so as to bring the penniform rugæ into view, an appearance is presented which might readily be mistaken for ulceration," and he suspected that "what has been called the cockscomb granulations or ulcerations is often formed in this way, the serrated edges of the so-called ulcer being in reality the penniform rugæ presenting at the os uteri denuded of epithelium, florid and enlarged." All remember that Dr. Emmet has graphically described this condition as generally one of the results of old lacerations of the cervix uteri, and I deem it quite probable that this was the unrecognized fact in the cases of Tyler Smith.

I distinctly recall the circumstance that when Dr. Emmet first had the kindness to show me one of his patients, I remarked, "Why, this is exactly what I have been accustomed to show to students as Evory Kennedy's cockscomb granulations," when Dr. Emmet repositied the canal, and, quite to my surprise, the apparent granulations disappeared.

I have seen two cases of this character in patients in whom Emmet's operation for the cure of laceration had been previously performed, in one by Dr. Emmet, and the other by Dr. Sims. In both the operation was successful in relieving them from all distressing symptoms; in one for over four years, and in the other for nearly three years. The history of these patients was singularly alike, in that both were afterwards broken down by attendance and nursing of ill members of their family. Soon after, they were annoyed by a profuse and irritating leucorrhœa. Then followed too frequent and prolonged menstrual periods, backache, and reflex neuralgias. From the appearance of the

cervix I should never have suspected that either ever had laceration, but in both the so-called cockscomb granulations were very characteristic, but I could only in a very slight degree reposit the canal of the cervix, as can be done when this condition is the result of an existing laceration.

In both the general health was perfectly restored, the menstrual irregularities were overcome, the leucorrhea entirely disappeared, and the os tincæ regained a perfectly healthy color and form from constitutional treatment and the use of vaginal injections. In neither case was there any other local treatment. I may add, as a fact of some interest, that one of them gave birth to her only living child sixteen years before the operation. She afterwards had eight miscarriages, which, as she told me, Dr. Sims thought due, no doubt correctly, to the laceration. Emmet's operation was performed nearly three years ago, since which she has not again become pregnant until now, when, at the age of forty-three, she expects her confinement in November.

The influence of leucorrhea in developing disease of the pelvic organs may have been over-estimated by Tyler Smith, who believed that in a majority of cases in which morbid states of the os and cervix were present, cervical leucorrhea, or, in other words, a morbid and augmented secretion from the mucous glands of the cervical canal was the most essential part of the disorder, and that the diseased conditions of the lower segment of the uterus were often secondary affections resulting from the leucorrheal malady.

In the cases that I have just mentioned, as well as in many others that I have seen, his assertion seems to have been confirmed, that a morbid condition of the cervix uteri may be remedied again and again with a tolerable certainty of the recurrence of the disorder, unless the cervical secretion be brought to a healthy condition. He believed that "leucorrhea was often not only the cause of epithelial abrasion of the os and cervix and superficial ulceration, but, when long continued, by its consequent irritation it generally induced induration and enlargement of the os and cervix."

It is often very difficult to determine which given condition bears the relation of cause, and which of effect. But clinical experience has convinced me that his views on this subject have more foundation than I formerly supposed. Some years ago a lady from a Western town called on me in June only a few days before I was to leave the city for the summer. She had long suffered from uterine disease, and had been treated by many able physicians with temporary benefit. Two years before she had passed the winter in New York under the treatment of an eminent gynecologist and particular friend of mine, now dead, who had made applications to the cervix every fifth day — except during menstruation, which was profuse and prolonged — for several months. She returned to her home in the spring very much better, so that she thought herself cured, although the leucorrhœa was not perceptibly less. All her bad symptoms soon returned, and when I saw her she was in a miserable condition — extremely debilitated and anemic, a great sufferer from neuralgic pains, and from profuse but very irregular menstrual losses. The cervix was very low, resting on the perineum, very much enlarged, and painful on the slightest pressure. The vagina was filled with an offensive muco-purulent fluid, and the os patulous, presenting as marked an appearance of the so-called cockscomb granulations as I ever saw, which bled on the slightest touch. She also suffered greatly from gastric disturbances, obstinate constipation, and painful hemorrhoids. I may mention that I was obliged to put her under the influence of chloroform in order to make a satisfactory examination. I did not much care to have the responsibility of the case, and vainly endeavored to induce her to place herself under the treatment of the late Dr. George T. Elliot, who was to be in the city during the summer, but she was not transferable. So, after seeing her for a few days, I gave her such prescriptions as I hoped would be useful in overcoming her gastric troubles, the constipation, and the hemorrhoids, and, if these means proved successful, she was then to take continuously for months the chlorate of potash and the lactate

of iron in the infusion of columba. I advised her also to pass the summer at Long Branch. She had not been able to walk, and had been carried up and down stairs for more than eighteen months. Sea bathing was therefore impossible, but I directed that she should be sponged with sea water, and afterwards thoroughly rubbed, and that she should use a quart of sea water as a vaginal injection every night and morning, except during menstruation and the two days preceding and following this period. In September this lady greatly surprised me by walking into my consulting room so entirely changed in her appearance that I did not in the least recognize her. The change in her pelvic organs was equally remarkable. The cervix was still enlarged, but was reduced at least one half in size, and much higher in the vagina, and the os presented a healthy color and form. She had not been conscious of leucorrhea for several weeks, an exemption which she had not had before for many years. She remained in New York for a few weeks only. I will add that this lady in early married life had two children, but lost both when young by scarlet fever. She had not been pregnant for twelve years, when I saw her first. She came to New York in January, two years afterwards, to be attended by me in her confinement, which terminated happily, and she has been in excellent health since that time.

This case has been a most instructive lesson to me, and in several others where circumstances have not permitted the use of any local treatment. I have seen leucorrhea, and various morbid conditions of the os and cervix, disappear by the use of proper hygienic measures, and such treatment as was indicated for the improvement of the general health. Tyler Smith in positive terms states his belief that what is called the "irritable uterus" is nothing more than leucorrhea, attended by a neuralgic condition of the os and cervix uteri. It must be understood that he uses the term leucorrhea as signifying the same condition which Scanzoni calls "chronic catarrh of the uterine mucous membrane." I have long given up the treatment of

this troublesome class of cases which Gooch designated as irritable uterus, by topical agents, but I have had some success in constitutional treatment, and will presently refer to the physiological and anatomical reasons for this course.

While all accept the statement that local and constitutional causes combine to develop leucorrhea, yet I think it may be questioned whether the latter be not too often disregarded in the present day, both in the diagnosis and the treatment of this disorder. Many of these constitutional causes, such as atmospheric changes which develop other and general catarrhal affections, a cold damp climate or residence, plethora in some, anemia in others, everything which induces defective nutrition and debility, as prolonged lactation, excessive fatigue from certain employments, the continued standing position for many hours of shop girls, are all so well understood as causes, that further reference to them would be a waste of time. The influence of nerve disturbance as a consequence of defective nutrition in causing this affection, is perhaps not so generally appreciated, although most practitioners know the fact that in some of their patients strong mental emotion is sure to bring on a troublesome leucorrhea.

The anatomy and physiology of the organs of reproduction in women are no doubt well known to all practitioners, but I suspect that many overlook the bearing of certain points on the affections we are now considering. Mayrhofer calls attention to the fact that in virgins the arteries of the uterus have a straight course, but during pregnancy they are turned spirally, and after confinement they never recover their straight direction. He suggests that this may explain the reason why disturbances in the uterine circulation which have the character of retardation are more easily remedied in virgins than in parous women.

But the veins are of much more importance in the question of impeded circulation than the arteries, not only because they are much more numerous, but because they have no valves. They debouch into the uterine and pampiniform plexuses, which are situated outside of the peritoneum,

and when the pressure of the abdominal cavity is greater than that of the atmosphere it prevents them from being emptied. Preparations of the uterus injected with wax show an enormous preponderance of veins over arteries. Then it must be remembered that the uterus is a muscular organ, and that when there exists a deficiency in contractile power, as in an enlarged and flabby uterus, this contributes to a blood stasis and venous congestion, and consequently a morbid condition of its glandular secretions. It must be obvious that anemia, defective nutrition from bad blood, all the so-called cachectic conditions, any disease of the heart which weakens its propulsive force — all these conditions diminish the power of overcoming the impediments in the way of the removal of the venous blood from the pelvic vessels, and especially those of the uterus and its surroundings.

The importance of the liver and its portal circulation has long been known and insisted upon, notably by Rigby and Mackenzie.

There are numerous cases which come under the observation of medical men in which all these physiological and anatomical considerations have an important bearing, where local treatment is not practicable, or would be worse than useless. I will only allude to a few which may be mentioned as distinct classes.

Leucorrhœa to such a degree as to attract attention, with its associate symptoms, menstrual irregularities, back-ache, and irritable bladder, is not at all rare in young unmarried ladies. Every year many such are brought to me, chiefly from those who have come to the city to finish their education, as it is termed.

I may be permitted to remark parenthetically, that, contrary to what I believe is the general impression, my observation leads me to the conclusion that a large majority of such greatly improve in their appearance and health by coming to the city, when they have sufficiently large and well ventilated dormitories, and are not crowded in study rooms warmed only by furnace heat, or in an atmosphere vitiated

by gas-lights, and are not over-stimulated to study and practice at the piano; for they have an abundance of well-prepared food and regular open air exercise, and some, for the first time in their lives, have an intelligent supervision of their hygienic habits and conditions. There has been a wonderful change in these particulars in our New York schools within a few years past.

But exceptions are found under the most favorable surroundings, and the disorders we are now discussing are not rare, particularly during the first year of their school residence in the city. The moral depression from home-sickness, and exhaustion of nerve power exercised in unaccustomed directions, seem to me the most common of the constitutional causes in these cases. I suspect the most frequent error in the treatment of such cases is found in a disregard of the necessity of such remedial agents as will secure a healthy performance of all the organic functions—a neglect of the *morale*, and a routine prescription of some preparation of iron, which, under these circumstances, is sure to destroy the appetite and produce headache, sleeplessness, and other nerve disturbances. I have had many brought to me, taken away from school by anxious parents, where this has apparently been the history.

In very many cases in which leucorrhœa and other uterine disorders have been the consequence of parturition, local treatment is useless, and often positively injurious, but a cure results from appropriate constitutional treatment. Of course, a careful and thorough examination should be made of the organs in the pelvic cavity in all such cases, and if any lesion be found which local treatment can cure, it should be resorted to. But local treatment will not effect involution of a large flabby uterus, or contract its enlarged veins, and, to my mind, it is very doubtful whether it be useful in effecting restoration of defective tissue. But I do believe that these results may often be accomplished by proper constitutional treatment.

In women who have passed the climacteric, leucorrhœa is not an uncommon disorder, which not only greatly annoys

them, but often causes great anxiety of mind. I think that such women are generally much more averse to a physical examination of the pelvic organs than at an earlier period of life — I may even say than some of the virgins — partly from a fear that malignant disease may be found, but chiefly from psychological reasons. Fortunately, in a vast majority of cases, such examination is not necessary, as the disorder arises from constitutional causes. If it be due to such local conditions as prolapse of the vagina or uterus, vaginal cystocele, rectocele, or hemorrhoids, there will be other symptoms indicating the necessity for examination of the organs. If the leucorrheal discharges are occasionally sanguinolent, or there are occasionally small losses of blood from the genitalia in women who have for months or years ceased to menstruate, I think that an examination is absolutely imperative.

I deem it quite unnecessary to take up the time of the Society in describing the numerous constitutional disturbances which cause this affection in women who have passed the climacteric, or in mentioning the various indications for treatment.

I have been tempted to detail some cases illustrating the various points which have been discussed, but before such a society as this, I deem it wholly unjustifiable to rehearse well-known elementary facts, and my only excuse for this paper is the belief that the very rapid advance which gynecology is making in other directions has led to a neglect of some considerations of great importance.

